



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,339	08/14/2003	Reed A. Inman	TRW(VSSIM)6306	1927

7590 07/21/2005

TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
1111 LEADER BLDG.
526 SUPERIOR AVENUE
CLEVELAND, OH 44114-1400

EXAMINER

DUNN, DAVID R

ART UNIT	PAPER NUMBER
----------	--------------

3616

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/642,339	INMAN ET AL.	
	Examiner	Art Unit	
	David Dunn	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/14/03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 8/14/2003 is acknowledged. See enclosed IDS form.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 6-8, 10, 11, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Swann et al. (6,431,595).

Swann et al. discloses an inflator comprising: a structure (30) defining first (10) and second (in 60) chambers, the first chamber being for containing a volume of fluid (70) under pressure, said second chamber being in fluid communication with an outlet passage (62) for directing fluid from the inflator; a closure member (64) openable to release said fluid to flow out of said first chamber; an initiator (76) actuatable to open said closure member; and a filter (74) disposed in said second chamber, said fluid being directed from said first chamber into said second chamber and through said filter into said outlet passage upon opening of said closure member (see column 2, lines 57-63).

The filter comprises a first portion (left edge of filter, see Figure 2) engaging the initiator (at cup 72) and a second portion (right edge) engaging a surface in the second chamber, the initiator urged against the first portion which urges the second portion against the surface to clamp the filter in the chamber (see Figure 2). As seen in Figure 2, the first and second chambers are aligned with each other along an axis (44) of the inflator, the fluid flowing from the first chamber in to the second chamber in a direction parallel to the axis, the fluid flowing perpendicular to the axis through the outlet passage (62). The structure comprises a container (40) having an open end and an opposite closed end; and an end cap (60) fixed to the open end of the container, the first chamber being defined within the container and extending in to the end cap, the second chamber being defined in the end cap (i.e., in cap 72), the closure member being fixed to an inner surface of the end cap and separating the first and second chambers. The container and end cap have equal outside diameters and the end cap has a varying thickness (see Figure 2). The closure member comprises a burst disk (see column 2, lines 28-29).

Regarding claim 13, a portion of the output means (60) is deformed onto the initiator means (see far left end of 60). The apparatus includes a side air bag (14; see Figure 1) and a fill tube (20).

4. Claims 1, 2, 6-8, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Fink (6,543,806).

Fink discloses an inflator comprising: a structure (10) defining first (38) and second (in 46) chambers, the first chamber being for containing a volume of fluid under pressure, said second chamber being in fluid communication with an outlet passage (18) for directing fluid from the inflator; a closure member (96) openable to release said fluid to flow out of said first

Art Unit: 3616

chamber; an initiator (20) actuatable to open said closure member; and a filter (98) disposed in said second chamber, said fluid being directed from said first chamber into said second chamber and through said filter into said outlet passage upon opening of said closure member (see column 5, lines 45-58).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-5, 9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swann et al. in view of Goto et al. (6,705,637).

Swann et al. is discussed above but fails to show the filter having ring shaped top and bottom walls and a cylindrical middle portion with apertures.

Goto et al. teaches a filter portion (140) for an inflator (see Figure 1) with a ring shaped top (see Figure 3; right edge of 140) and a ring shaped bottom (left edge, at 141) and a cylindrical side wall with apertures (142).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Swann et al. with the teachings of Goto et al. a filter portion with ring shaped top and bottoms and a cylindrical side wall with apertures in order to modify the inflator for various sizes and to filter to different style initiators as required by design.

Art Unit: 3616

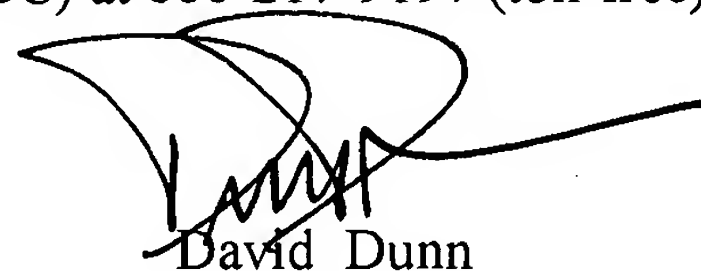
Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Halas et al. shows an inflator of interest. Adam et al. shows an inflator of interest.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 571-272-6670. The examiner can normally be reached on Mon-Fri, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Dunn
Primary Examiner
Art Unit 3616